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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,680	11/15/2001	Hideo Hoshuyama	111118	7530
25944	7590	10/14/2004	EXAMINER	
OLIFF & BERRIDGE, PLC			LAROSE, COLIN M	
P.O. BOX 19928			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22320			2623	

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/987,680

**Applicant(s)**

HOSHUYAMA, HIDEO

**Examiner**

Colin M. LaRose

**Art Unit**

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6 and 12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Computer programs per se are considered non-statutory unless they are expressly stored on a recording medium, so that the recording medium contains instructions to carry out the steps of the computer program. Appropriate correction of claims 6 and 12 is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(e) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,504,551 by Takashima et al. ("Takashima").

Regarding claims 1, 5, and 6, Takashima discloses an image processing device/method/computer program (figure 2), comprising:

a color coordinate conversion device (second matrix circuit 44) which converts color coordinates of a color signal which has been obtained by color separation; and

a two dimensional look up table (LUT 52 of figure 12, which is included in the secondary processor 38) which is used for correcting a chromaticity signal which has been obtained by color coordinate conversion by said color coordinate conversion device.

Regarding claim 2, Takashima discloses an image processing device according to claim 1, wherein said two dimensional look up table, along with being used for correcting said chromaticity signal, also is used to output a luminance correction amount based upon said chromaticity signal (i.e. LUT 52 outputs a Y correction factor).

Regarding claim 3, Takashima discloses an image processing device according to claim 1, wherein said color coordinate conversion device converts color coordinates of a color signal by matrix calculation (i.e. second matrix circuit performs a matrix calculation).

Regarding claim 4, Takashima discloses an image processing device (figure 2), comprising:

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a first matrix calculation device which converts a color signal which has been obtained by color separation into a luminance signal (second matrix circuit 44 converts RGB into a signal comprising a luminance signal Y);

a second matrix calculation device which converts said color signal into a chromaticity signal (second matrix circuit 44 converts RGB into a signal comprising a chromaticity signal UV);

a two dimensional look up table (LUT 52 of figure 12, which is included in the secondary processor 38) which is used for correcting said chromaticity signal which has been converted by said second matrix calculation device, and outputs a luminance correction amount based upon said chromaticity signal (i.e. LUT 52 outputs a Y correction factor); and

a luminance correction device (54Y, figure 12) which corrects said luminance signal which has been converted by said first matrix calculation device by said luminance correction amount which is outputted based upon said two dimensional look up table.

Regarding claims 7 and 8, Takashima discloses a computer-readable computer program product according to claim 6, wherein the computer-readable computer program product is a recording medium/carrier wave (see figure 1).

Regarding claims 9 and 12, Takashima discloses an image processing method/computer program (figure 2) for converting a first color coordinates (i.e. RGB) indicated by a first color signal (R), a second color signal (G) and a third color signal (B) into a second color coordinates (i.e. YUV) indicated by a fourth color signal (YUV), a fifth color signal (U) and a sixth color signal (V), comprising:

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calculating the fourth color signal using the first color signal through the third color signal (second matrix circuit 44);

calculating the fifth color signal using the first color signal through the third color signal (second matrix circuit 44);

calculating the sixth color signal using the first color signal through the third color signal (second matrix circuit 44);

reading out correction values (output of LUT 52, figure 12) for the fourth color signal, the fifth color signal and the sixth color signal based upon the calculated fifth signal and sixth signal from a storage device (i.e. LUT 52) where the correction values for the fourth color signal, the fifth color signal and the sixth color signal are stored and can be read out based upon the calculated fifth signal and sixth signal; and

correcting (54Y, 54U, 54V of figure 12) the calculated fourth color signal, the calculated fifth color signal and the calculated sixth color signal based upon the correction values for the fourth color signal, the fifth color signal and the sixth color signal read out from the storage device.

Regarding claim 10, Takashima discloses an image processing method according to claim 9, wherein the storage device has a two dimensional look up table (i.e. LUT 52 is a 2-D look-up table).

Regarding claim 11, Takashima discloses an image processing method according to claim 9, wherein:

the first color coordinates is indicated by a color signal R, a color signal G and a color signal B;

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the second color coordinates is indicated by a luminance signal Y and color difference signals Cb and Cr; and

the fifth signal corresponds to the color difference signal Cb and the sixth color signal corresponds to the color difference signal Cr. (Takashima's YUV is substantially the same as the claimed YCbCr in that they both comprise a luminance signal and two chromaticity signals).

Regarding claims 13 and 14, Takashima discloses a computer-readable computer program product according to claim 12, wherein the computer-readable computer program product is a recording medium/carrier wave (see figure 1).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (703) 306-3489. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au, can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (703) 306-0377.

CML

Group Art Unit 2623

4 October 2004



VIKKRAM BALI  
PRIMARY EXAMINER